FORM PTO-1449 (Modified) INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)	Attorney Docket No.: 57715/03-507
	Applicant(s): Raun et al.
	Title: Use of within-field-element-size CV for improved nutrient fertilization in crop production
	Serial No.: 10/801,757 Filing Date: 03/16/2004
	Group: 3643 Examiner: Unknown

U.S. PATENT DOCUMENTS

Examiner Initials		Document No.	Date	Name	Class	Subclass
	AA	6,601,341	08/05/2003	Raun et al.	47	58.1
	AB	6,444,975	09/03/2002	Reusch	250	222.1
	AC	6,393,927	05/28/2002	Biggs et al.	73	866
	AD	6,366,681	04/02/2002	Hutchins	382	110
	AE	6,160,902	12/12/2002	Dickson et al.	382	110
	AF	6,062,496	05/16/2000	Kinter	239	462
	AG	6,052,187	04/18/2000	Krishnan et al.	356	364
	AH	5,837,997	11/17/1998	Beck et al.	250	227.11
	AI	5,833,144	11/10/1998	Kinter	239	462
	AJ	5,809,440	09/15/1998	Beck et al.	701	50
	AK	5,793,035	08/11/1998	Beck et al.	250	222.1
	AL	5,789,741	08/04/1998	Kinter et al.	250	226
	AM	5,768,823	06/23/1998	Nelson	47	1.7
	AN	5,764,819	06/09/1998	Orr et al.	382	110

Examiner Initials		Document No.	Date	Name	Class	Subclass
	AO	5,763,873	06/09/1998	Beck et al.	250	214 B
	AP	5,606,821	03/04/1997	Sadjadi et al.	47	1.7
	AQ	5,585,626	12/17/1996	Beck et al.	250	222.1
	AR	5,507,115	04/16/1996	Nelson	47	1.7
	AS	5,389,781	02/14/1995	Beck et al.	250	226
	AT	5,296,702	03/22/1994	Beck et al.	250	226
	AU	5,222,324	06/29/1993	O'Neall et al.	47	1.7
	AV	5,144,767	09/08/1992	McCloy et al.	47	1.7
	AW	4,952,229	08/28/1990	Muir	71	7
	AX	3,910,701	10/07/1975	Henderson et al.	356	39
	AY	3,670,963	06/20/1972	Stroebel et al.	239	77
	AZ	US 2003/0019152	01/30/2003	Raun et al.	47	58.1

FOREIGN PATENT DOCUMENTS

Examiner Initials		Document No.	Date	Name (Inventors)	Class	Translation Yes / No
	BA	DE 198 60 306 A1	03/23/2000	Reusch	A 01 C 21/00	No
	BB	DE 199 13 971 A1	09/28/2000	Wollring	A 01 C 21/00	No
	BC	WO 01/45490 A1	06/28/2001	Aspelin et al.	A 01 C 21/00	

OTHER ART

Examiner Initial		(Including Author, Title, Date, Pertinent Pages, Etc.)
	BD	LaRuffa, J.M., et al. 2001. "Optimum field element size for maximum yields in winter wheat, using variable nitrogen rates." *Journal of Plant Nutrition.* 24(2): 313-325.
	BE	Lukina, E.V., et al. 2001. "Nitrogen fertilization optimization algorithm based on in-season estimates of yield and plant nitrogen uptake." *Journal of Plant Nutrition.* 24(6): 885-898.
	BF	Patchen Weed Seeker™ PhD1620 Brochure, Undated.
	BG	Patchen Weed Seeker™ PhD600 Brochure, Undated.
	BH	Raun, W.R., et al. 2001. "In-season prediction of potential grain yield in winter wheat using canopy reflectance." *Agronomy Journal.* 93:131-138.
	BI	Sérelé, C.Z., et al. 2000. "Detection of corn nitrogen status from airborne vis-Nir imagery using artificial neural networks." Proceedings of Fifth International Conference on Precision Agriculture. Unnumbered.
	BJ	Solie, J.B., et al. 2000. "In-season N fertilization using an in-season estimate of potential yield." Proceedings of Fifth International Conference on Precision Agriculture. Unnnumbered.
	BK	Solie, J.B., et al. 1996. "Optical sensor based field element size and sensing strategy for nitrogen application." *Transactions of the ASAE* 39(6): 1983-1992.
	BL	Staggenborg, S.A., et al. 2000. "Predicting grain yield variability with infrared images." Proceedings of Fifth International Conference on Precision Agriculture. Unnumbered.
	BM	Stone, M.L., et al. 1996. "Use of spectral radiance for correcting in-season fertilizer nitrogen deficiencies in winter wheat." *Transaction of ASAE.* 39(5): 1623-1631.
	BN	Yang, C., et al. 2000. "Relationships between yield monitor data and airborne multispectral digital imagery." Proceedings of Fifth International Conference on Precision Agriculture. Unnumbered.

EXAMINER	DATE CONSIDERED
[signature]	8 February 2007

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance. Include copy of this form with next communication to applicant.

FORM PTO-1449 (Modified) **SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT** ***(Use several sheets if necessary)***	Attorney Docket No.: 57715/03-507
	Applicant(s): William R. RAUN et al.
	Title: Use of within-field-element-size CV for improved nutrient fertilization in crop production
	Serial No.: 10/801,757 Filing Date: 03/16/2004
	Group: 3433 Examiner: Unknown

U.S. PATENT DOCUMENTS

Examiner Initials		Document No.	Date	Name	Class	Subclass
	AA					

FOREIGN PATENT DOCUMENTS

Examiner Initials		Document No.	Date	Name (Inventors)	Class	Translation Yes / No
	AB	EP 1 429 594 B1	April 2003	Reusch	A01B 79/00	No

OTHER ART

Examiner Initial		(Including Author, Title, Date, Pertinent Pages, Etc.)
	AC	Hooper, A.W. 1976. A photoelectric sensor for distinguishing between plant material and soil. *J. Agric. Eng. Res.* Volume 21, 145-155

Examiner Initial		(Including Author, Title, Date, Pertinent Pages, Etc.)
	AD	Industrial Control Applications, March 1991. Infrared sensing and data transmission fundamentals. Motorola. DL412/D, AN1016, pp 349-354; http://www.web-ee.com/primers/files/an1016.rev0.pdf
	AE	"Seeing the Light of Nitrogen." *Nebraska Farmer.* Mid-February 1996, pp 14-16.
	AF	Palmer, J et al. 1971. Automatic control of sugar beet singling and thinning by means of an on-line digital computer. *J. Agric. Eng. Res.* Volume 16 (2) pp 107-125
	AG	Ritchie, J.C etal. 1992. Airborne laser measurements of rangeland canopy cover and distribution. *J. Range Manage.* 45:189-193
	AH	Stafford, J.V. et al. 1989. A portable infrared moisture meter for agricultural and food materials: Part 1, Instrument development. *J. Agric. Eng. Res.* Volume 43, pp 45-56
	AI	Stone, M. et al. ~1994 to 1995. High Speed Networking in Construction and Agricultural Equipment. Web Pub. http://biosystems.okstate.edu/Home/mstone/hsnet.htm
	AJ	Tools with Eyes. Mid-March 1989. *Farm Journal.* pp 16-18

Examiner Signature	Date Considered
	8 February 2006

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance. Include copy of this form with next communication to applicant.

FORM PTO-1449 (Modified) SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT *(Use several sheets if necessary)*	Attorney Docket No.: 57715/03-507	
	Applicant(s): William R. RAUN et al.	
	Title: Use of within-field-element-size CV for improved nutrient fertilization in crop production	
	Serial No.: 10/801,757	Filing Date: 03/16/2004
	Group: 3643	Examiner: Unknown

U.S. PATENT DOCUMENTS

Examiner Initials		Document No.	Date	Name	Class	Subclass
	AA	5,850,620	12/15/1998	Skotnikov et al.	702	3
	AB	6,178,253	01/23/2001	Hendrickson et al.	382	110

FOREIGN PATENT DOCUMENTS

Examiner Initials		Document No.	Date	Name (Inventors)	Class	Translation Yes / No
	AC					

OTHER ART

Examiner Initial		(Including Author, Title, Date, Pertinent Pages, Etc.)
	AD	

Examiner Signature	Date Considered
	8/16/2006

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